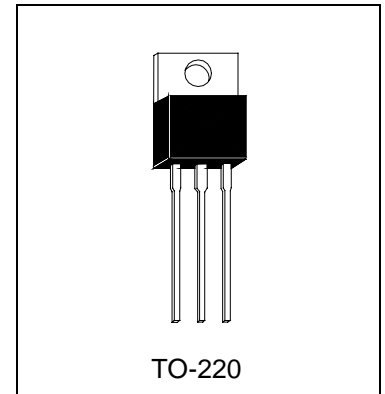




HMJE13007

NPN EPITAXIAL PLANAR TRANSISTOR



Description

- High Voltage, High Speed Power Switch
- Switch Regulators
- PWM Inverters and Motor Controls
- Solenoid and Relay Drivers
- Deflection Circuits

Absolute Maximum Ratings (Ta=25°C)

- Maximum Temperatures
 Storage Temperature -50 ~ +150 °C
 Junction Temperature 150 °C Maximum
- Maximum Power Dissipation
 Total Power Dissipation (Tc=25°C) 80 W
- Maximum Voltages and Currents (Ta=25°C)
 VCEX Collector to Emitter Voltage 700 V
 VCEO Collector to Emitter Voltage 400 V
 VEBO Emitter to Base Voltage 9 V
 IC Collector Current Continuous 8 A
 IB Base Current Continuous 4 A

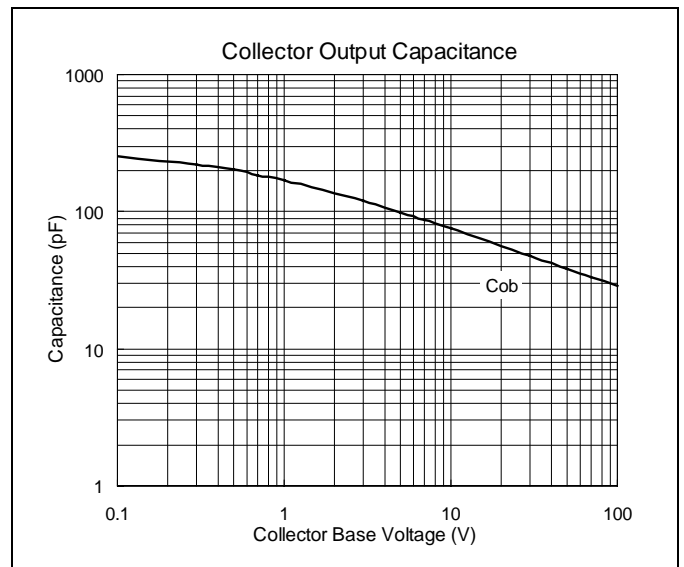
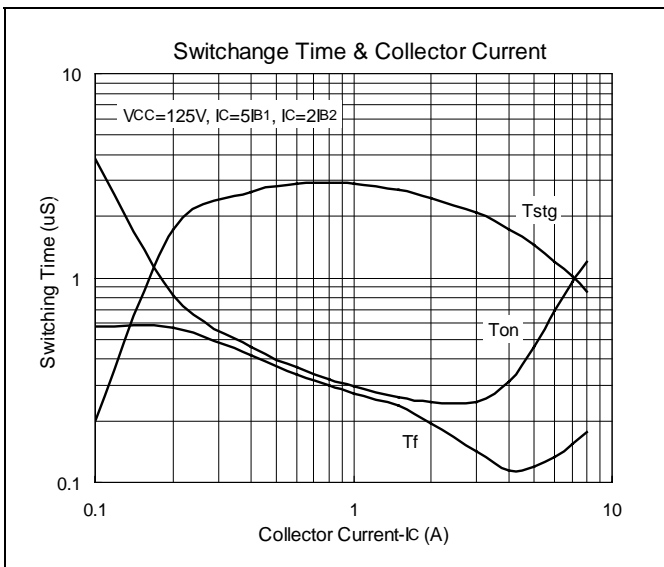
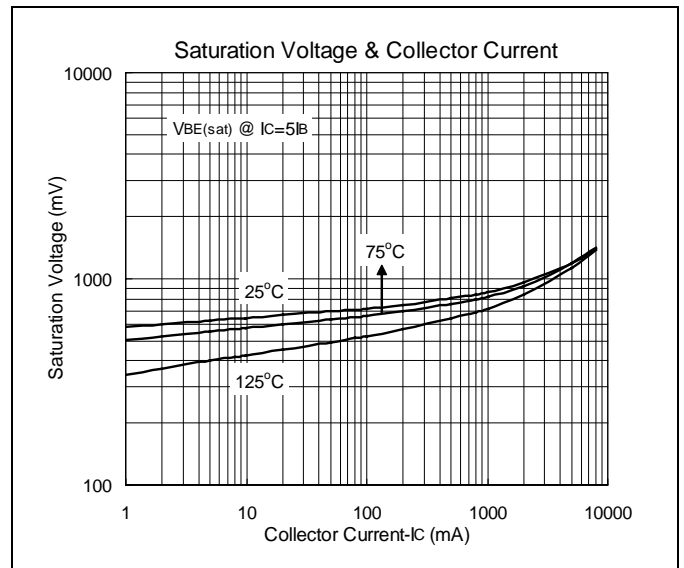
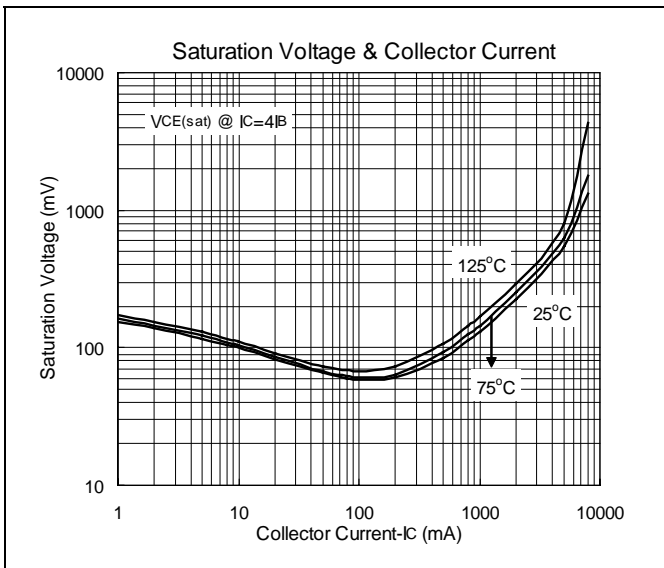
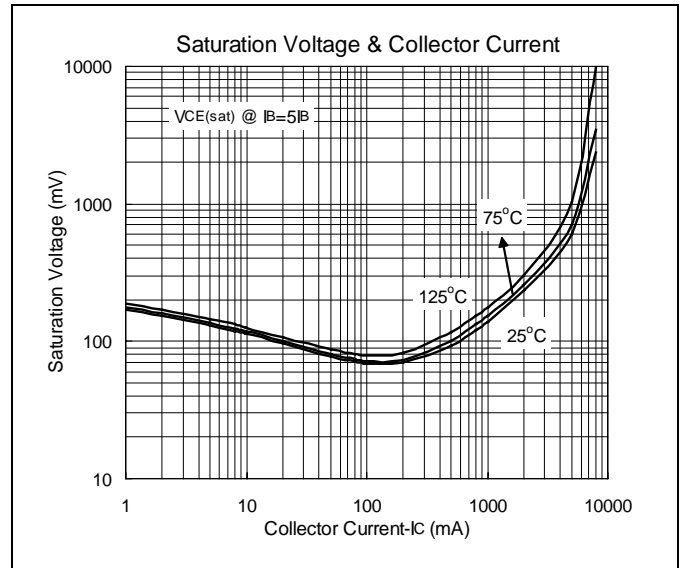
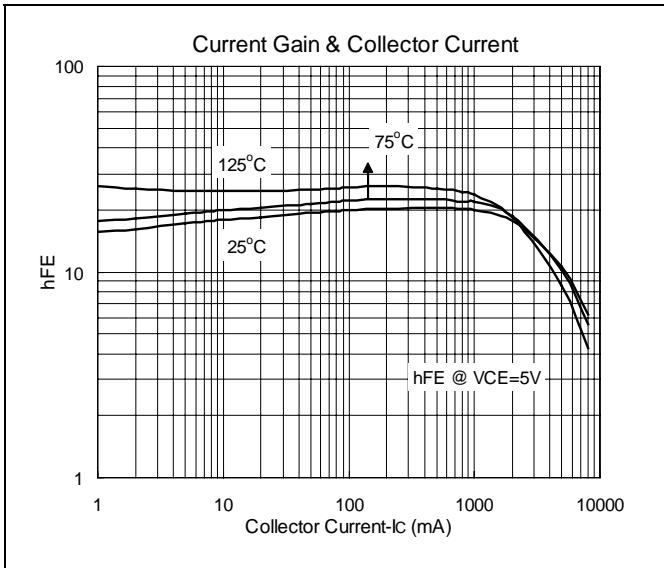
Characteristics (Ta=25°C)

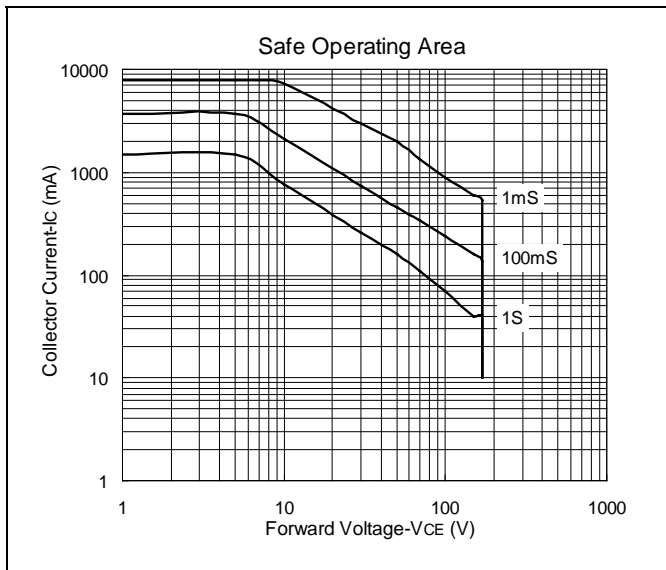
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCEX	700	-	-	V	IC=1mA, VBE(off)=1.5V
BVCEO	400	-	-	V	IC=10mA
IEBO	-	-	100	uA	VEB=9V
ICEX	-	-	100	uA	VCE=700V, VBE(off)=1.5V
*VCE(sat)1	-	-	1	V	IC=2A, IB=0.4A
*VCE(sat)2	-	-	2	V	IC=5A, IB=1A
*VCE(sat)3	-	-	3	V	IC=8A, IB=2A
*VBE(sat)	-	-	1.2	V	IC=2A, IB=0.4A
*VBE(sat)	-	-	1.6	V	IC=5A, IB=1A
*hFE1	10	-	-		IC=2A, VCE=5V
*hFE2	6	-	-		IC=5A, VCE=5V
*hFE3	10	-	30		IC=0.5A, VCE=5V

*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%



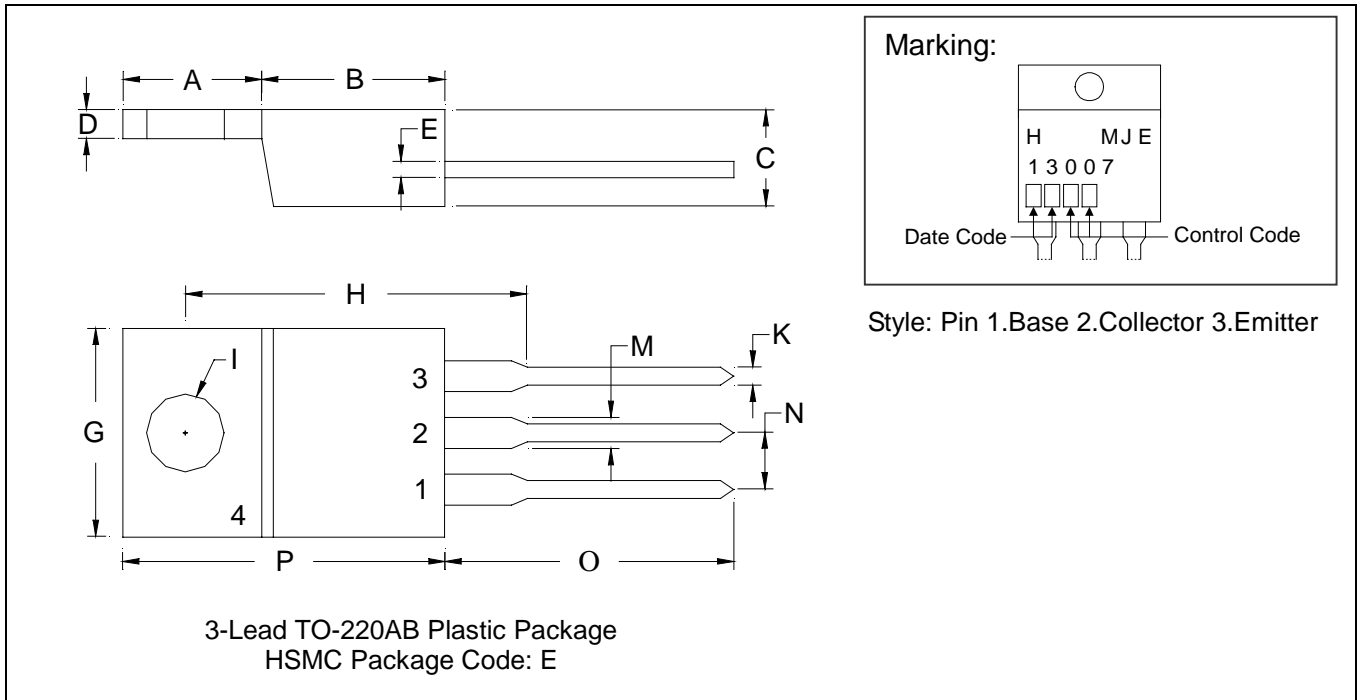
Characteristics Curve







TO-220AB Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.2197	0.2949	5.58	7.49	I	-	*0.1508	-	*3.83
B	0.3299	0.3504	8.38	8.90	K	0.0295	0.0374	0.75	0.95
C	0.1732	0.185	4.40	4.70	M	0.0449	0.0551	1.14	1.40
D	0.0453	0.0547	1.15	1.39	N	-	*0.1000	-	*2.54
E	0.0138	0.0236	0.35	0.60	O	0.5000	0.5618	12.70	14.27
G	0.3803	0.4047	9.66	10.28	P	0.5701	0.6248	14.48	15.87
H	-	*0.6398	-	*16.25					

- Notes: 1.Dimension and tolerance based on our Spec. dated Sep. 07,1997.
 2.Controlling dimension: millimeters.
 3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

Material:

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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